




STEM Advisory Council Budget Year 2 (FY 2014)

Iowa Governor's STEM Advisory Council, FY 2013			
1. Regional STEM Network	a. Regional STEM Hubs <i>(Hubs cost-match manager salaries)</i>	6 @ \$67,410 = \$404,460	\$3,548,328
	b. Scale-up programming <i>(Non-state cost-share required year 2)</i>	6 @ \$523,978 = \$3,143,868	
2. Statewide STEM Responsibilities	a. Public Awareness(matched by private sector)..... [Exec. Order: "programming designed to elevate public awareness of the opportunities..."]	\$150,000	\$664,109
	b. Conferences, exhibits, forums, etc.....	\$83,000	
	c. Nontraditional STEM Tchr recruitment (Intern-licensure)..... [Exec. Order: " identify, recruit, prepare, and support the best mathematics and science teachers"]	\$211,109	
	d. Real World Externships (committed cost-share of \$1.1M NSF grant thru 2014)	\$20,000	
	e. Statewide STEM evaluation [Exec. Order: "The initiative shall evaluate the effectiveness of programming to document best practices."]	\$100,000	
	f. Iowa Testing.....	\$100,000	
	g. Equella (Dept. of Ed.-owned platform for webportal)	(no charge)	
3. Operations arm at IMSEP	a. Program arm staff – director, financial/program manager, communications, grant coordinator, ½ time secretary, student staff	\$477,563	\$487,563
	c. Office supplies, equipment.....	\$10,000	
Total STEM State appropriation 2013 =			\$4,700,000




WHAT'S IN THE HOPPER?

Governor's STEM Council 2013

TARGETED PRIORITIES <i>established in 2011</i>	Student interest/achievement	Technology-enhanced instruction	STEM Teacher Recruitment/Preparation	Post-secondary readiness	Policy	Public Awareness	Public-Private Partnership	STEM For All
RECOMMENDATION <i>S of working groups 2012</i> 	Professional development in STEM	Recognitions, incentives	STEM license/endorsement	Business skills map	Coordinate P.D.	PR campaign	Incentive public-private partnerships	STEM-focused schools
	Virtual community	High speed internet	Pathway for STEM professionals to teach	Evidence-based practice	Competency-based	Career awareness	Model regional clusters	Parental engagement

PROGRAMS/TEAMS 2013	Scale-Up Round II Blended statewide P.D. model Web Portal	Broadband statewide I.D.E.A.S.	STEM License & endorsement model Nontraditional license pathway	NCRC @ Hubs Scale-up	Inter-state STEM	Awareness Campaign STEM Summits Youth voice	Business engagement plan Externships STEM Network	STEM Schools start-up Informal Network
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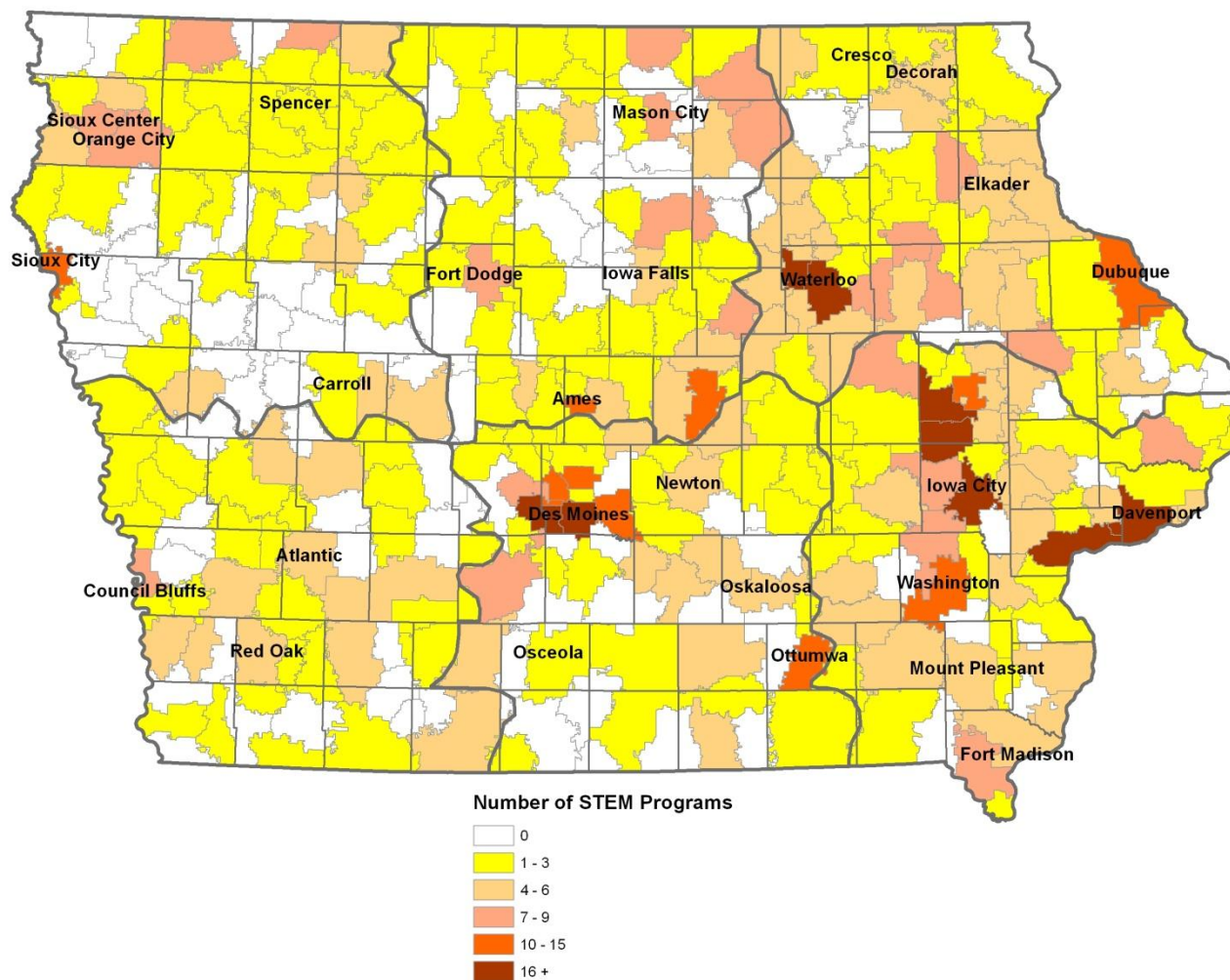
	REACH	Regional Networks = Managers, Hubs, Advisory Boards		
EVALUATION	LEA Scale-Up Reports	Statewide Survey of Public Attitudes Toward STEM	Statewide Student Interest Inventory	Iowa STEM Indicators System (ISIS)
SUPPORT	Grants Coordinator	Community Foundation	Summits, forums, conferences	





WHERE'S STEM?

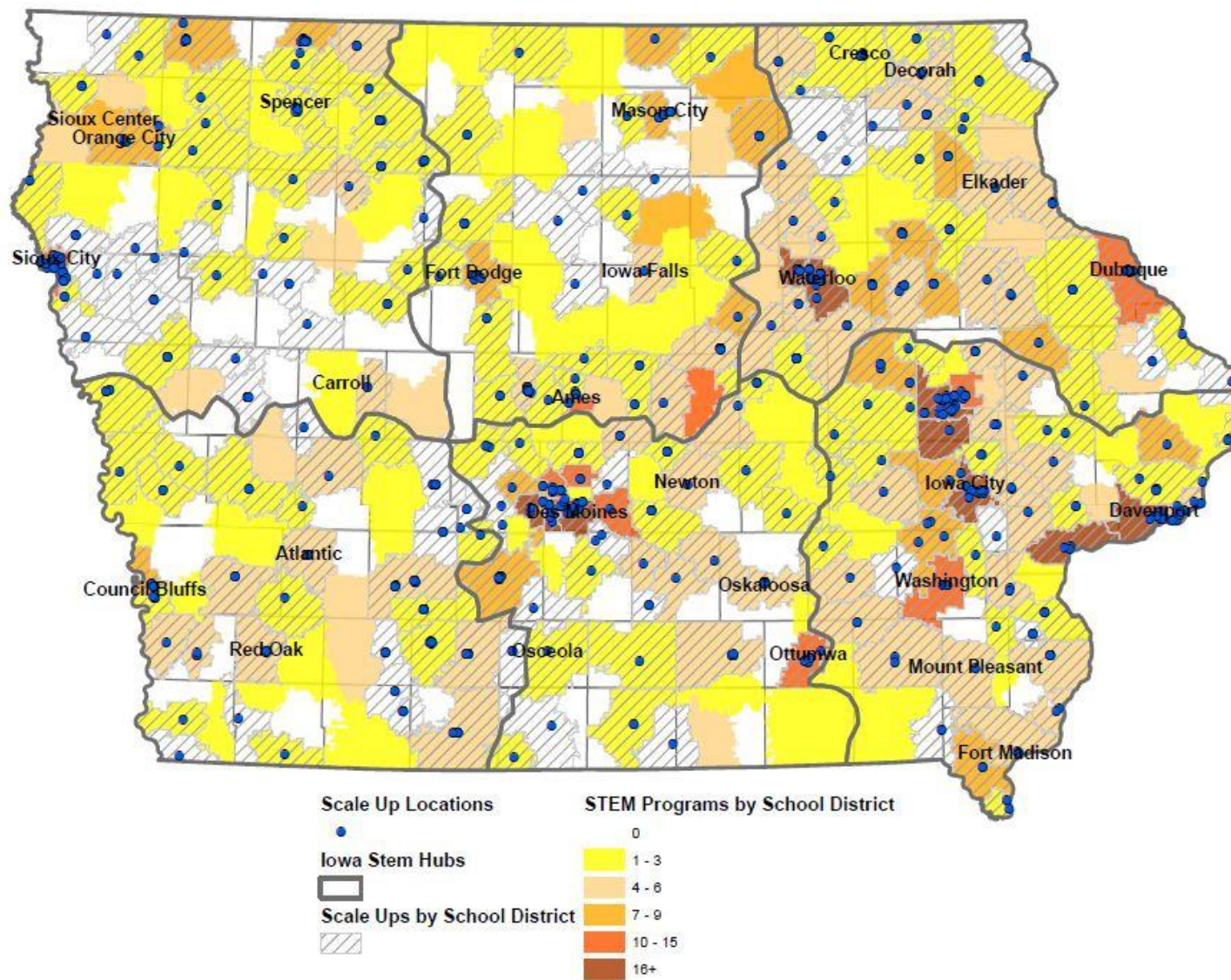
STEM Education Heat Map, September 2012



STEM

STEM

Number of STEM Programs and Scale-ups by School District, November 12, 2012



STEM

Iowa STEM: What's known so far?



- ✓ 26% of Iowans have heard of the acronym STEM
- ✓ 48% say their child is being very well prepared in STEM subjects by the school he/she attends
- ✓ 59% of parents say their child is likely to pursue a STEM career
- ✓ 87% of LEA respondents reported they thought the Scale-Up program had increased STEM interest among students *quite a bit or a great deal*.
- ✓ 71% of LEA respondents reported they thought the Scale-Up program had increased STEM achievement among students *quite a bit or a great deal*.
- ✓ 76% of LEA respondents reported they thought the Scale-Up program had increased STEM career interest among students *quite a bit or a great deal*.
- ✓ 62% of LEA respondents reported they thought the Scale-Up program had broadened STEM Participation among diverse students *quite a bit or a great deal*.

✓ = Survey of 2,000 Iowans by the CSBR at UNI, 2012

✓ = Mid-year Survey of Scale-Up implementers by the CSBR at UNI, 2013





Iowa STEM Monitoring Project

Objective: Systematically observe a series of defined metrics and sources to examine changes regarding STEM education and economic development in Iowa.

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

RISE
RESEARCH INSTITUTE
OF SCIENCE AND TECHNOLOGY

THE UNIVERSITY
OF IOWA



Center for Social and
Behavioral Research



Iowa STEM Indicators System (ISIS)

System to track publicly available data at the national, state, and regional levels

18 indicators in 4 areas:

1. K-12 student preparation
2. Achievement/interest
3. College completions
4. Employment

Data sources:

- Department of Education
- Iowa colleges and universities
- Census Bureau
- Iowa Workforce Development
- Scale-up programs
- Iowa Testing
- NAEP/ACT



Statewide Survey of Public Attitudes Toward STEM

Annual survey of Iowans regarding attitudes toward and awareness of STEM education and economic development

Special sections for parents of K-12 children (ages 4-11 and ages 12-19)

Year 1 data collection with 2,010 Iowans

Created to allow for comparisons with other state/regional/national studies



Statewide Student Interest Inventory

Annual assessment of Iowa K-12 student interest in STEM topics

Administered with regular Iowa Assessments in schools across the state

8 STEM interest items in 2 versions for older and younger students

Interest will be compared across demographic and geographic lines

Student interest and achievement will be compared



Scale-Up/Regional

Regional perspective on STEM programming and student involvement

Over 800 local education agencies (LEA) participating in 12 Scale-Up programs

Each LEA reports about local Scale-Up implementation process;

Assessment of STEM interest among student participants in Scale-Up programs

Assessment of STEM achievement among student participants in Scale-Up programs